

# Managing Land Sustainability and Training for the Future: Kansas State University and Fort Riley ITAM Undertake Cooperative Effort

By Dennis Takade

Central Regional Environmental Office

Fort Riley, known as the *Home of America's Army*, is located at the confluence of the Smoky Hill and Republican rivers in central Kansas. Originally, old Fort Riley was built to protect settlers coming down the Kansas River heading west. For over 150 years, Soldiers from Fort Riley have fought to help preserve the principles upon which this country was founded.

Today, one of Fort Riley's key missions is to provide training, readiness, and deployment support for two Brigade



M1A1 Abrams tank participating in field trial. *Photo courtesy of Kansas State University*.

Combat Teams (BCT) whose equipment consists of infantry, armor and artillery units equipped with heavy vehicles such as the M1A1 Main Battle Tank, M2 Infantry Fighting Vehicle, M109 155mm



Tank tracks in a figure 8 crossing pattern made during wet conditions. *Photo courtesy of Kansas State University*.

Self Propelled Howitzer and other smaller vehicles.

Accommodating this inventory might seem daunting; but, there are more than 100,000 acres of superb training land and 127 miles of trails available for training at Fort Riley. This quantity of land allows Fort Riley's Soldiers to participate in battalion level maneuvers and live fire training with every weapon system in a heavy division's assets.

However, heavy armored vehicle traffic can have an effect on the environment. This is clearly recognized by Fort Riley's Integrated Training Area Management (ITAM) personnel and researchers from Kansas State University as

being a crucial element in managing the land at Fort Riley over the long haul.

This long-term view is an important consideration for Ms. Peg Althoff, a Kansas State University agronomy graduate student who is conducting research at Fort Riley in conjunction with ITAM. Ms. Althoff, who works closely with Fort Riley's range control officer and the ITAM Program coordinator, is working on her masters degree. If she pursues doctoral work, she plans to spend three years or more collecting data at Fort Riley in addition to the 2 plus years she has already invested. Al-

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### **Last Hard Copy Version of Newsletter**

In the interest of conserving resources, this will the last hard copy version of the CREO Newsletter. Please contact us at the e-mail address listed in box on the back cover to receive the newsletter electronically.

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### **Chief Commentary**

Bart Ives - CREO Chief/DoD Region 7 REC bart.o.ives@usace.army.mil



As Chief of AEC's Central Regional Environmental Office, I often have many pleasant duties to take care of. Welcoming new staff to the CREO family is an especially pleasant duty. In this regard, I would like to announce the appointment of Mark Salley as Regional Environmental Coordinator for Region 7. Mark's background is presented on page 7 of this publication. In addition, I am most pleased to announce that an "old hand," Steve Scanlon has been selected for the position of Senior Army Regional Environmental Coordinator (SAR) in this office.

As many of you know, Steve was the Army's Regional Environmental Coordinator (REC) for Region 7. As the Region 7 Army REC, Steve routinely worked with state legislators, environmental regulatory officials, DoD installations and the other Services on a wide range of state environmental laws, rules and policies that impact military operations, training and readiness. Steve's vast experience, easy-going style and friendliness have gone a long way in developing very positive relationships with those outside and within the Army.

Steve's experience comes as a result of over 35 years of Army experience as an officer, enlisted man, DA civilian and environmental consultant. In his active duty assignments, Steve has had two tours with Headquarters, Department of the Army and a joint assignment in the Office of the Assistant Secretary of Defense. He has been with the Army Central Regional Environmental Office for the past 7 years.

Steve previously worked as a Senior Project Manager for Versar, Inc., of Springfield, Virginia, assigned to the US Army Central Regional Environmental Office in Kansas City, Missouri. He is a native son having been born and raised in Kansas City, Missouri and graduating with a Master of Science Degree from the University of Kansas. And finally, Steve is a devoted family man having a super wife, Rita, three children (Jennifer, Shannon and James) and three grandsons (Noah, Stephen and Peyton).

### **Regional Events Calendar**

- 1/5 Southwest Strategy Border
  Task Team Meeting,
  Tucson, AZ
- 2/3 Borderland Management Task Force Meeting, Tucson, AZ
- 2/14-16 DoD Sustainable Range Workshop, Jacksonville, FL
- 2/29-3/5 Army Environmental Training Symposium, Kansas City, MO
- 2/23-24 Texas Environmental Partnership Meeting NAS, Ft. Worth, TX
- 3/1-2 Southwest Strategy
  Agency Coordinators
  Meeting, Phoenix, AZ
- 4/19-21 US-Mexico Symposium on the Management of Natural and Cultural Resources, Las Cruces, NM
- 5/24-26 Federal Facilities Conference, Kansas City, KS

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# CREO Nine-State Area of Responsibility DoD REC Region 7 Army REC Region 6 Army REC Region 7

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### Fort Hood Raises Awareness of Program **During Texas Archaeology Month**

By Kristen E. Wenzel

Outreach Coordinator and Field Archaeologist, Fort Hood

The Fort Hood Cultural Resource Management (CRM) Team sponsored a variety of different events during the month of October to celebrate Texas Archeology month at Fort Hood and Fort Hood's contribution to understanding the past. This year saw the greatest public involvement during the time that the celebration has been held at Fort Hood.

Increasing the visibility of the program is an important aspect of Fort Hood's program, as it educates the public on issues such as site preservation, criminal looting regulations, and how the program supports the military mission in ensuring sustainability of training lands.

One of the events was an evening of lectures on archaeological excavations at Fort Hood. Under a cooperative agreement with Fort Hood, Mercyhurst Archaeological Institute of Erie, Pennsylvania conducts two summer field schools at installation sites. One school

excavated a historic homestead while the other worked on a prehistoric Native American rockshelter. These field schools serve a dual purpose in allowing Fort Hood CRM to accomplish necessary excavations while saving taxpayer dollars by having students gain required training for their education. The two field directors from this past summer's schools shared the results of

the first season of work to a full room of attendees.

The 2<sup>nd</sup> Annual Archaeology Fair was held on a lovely Saturday. Almost 100 children and parents showed up at the fair. This was over twice the number as compared to last year's crowd. Fortunately Fort Hood's Cultural Resource Team Members Dr. Cheryl Huckerby, Kristen Wenzel, Sunny



ORISE Intern Sunny Wood explains the process of making flintknap stone tools. Photo courtesy of Fort Hood.

Wood, and Jeanine Measel were prepared. Oak Ridge Institute for Science and Education (ORISE) Intern Sunny Wood demonstrated how to flintknap stone tools (see picture above ) while Kristen Wenzel directed kids in digging and mapping their own archaeology "sites." Dr. Huckerby and Jeanine Measel helped kids with the crafts, in-

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though it is too early to tell, Ms. Althoff's research may be crucial in determining soil properties that would indicate to Fort Riley land stewards that a tank range is becoming over-used and degraded. Her research will contribute to sound decision making to preserve and sustain valuable training land.

Ms. Althoff is cautious in drawing conclusions at this point in her research. "Anything we can say at this point is preliminary because we have only one season of data. Long-term research is what's needed in order to make accurate conclusions," Ms. Althoff says.

Moreover, Ms. Althoff is of the opinion that soil quality indicators of ecosystem alteration could be quite subtle. For example, if compaction reduces soil aeration then the populations of soil-dwellers like nematodes or earthworms could decline, but the impact of that decline is not easy to predict. Long-term research is needed to improve our ability to recognize critical changes that signal pending decline in soil quality.



Kansas State researcher taking samples for vegetation biomass analysis. Photo courtesy of Kansas State Uni-

Along with Ms. Althoff, other Kansas State University collaborators included agronomy professors Drs. Stephen Thien and Gerard Kluitenberg, and researchers from other departments. These collaborators include Dr. Phillip Gipson, leader of the U.S. Geological Survey Cooperative Fish and Wildlife Research Unit in the Kansas State Division of Biology, and Kansas State statistics professor Dr. Jeffery Pontius, who have been assessing the plant and wildlife responses to military training.

Ms. Althoff is a certified associate wildlife biologist. She has a bachelor's degree in interdisciplinary environmental science from Oglala Lakota College, South Dakota. 🔊

### **Army Transfers Environmental Stewardship of Longhorn Army Ammunition Plant Property to the US Fish and Wildlife Service**

**By Dennis Takade** 

Central Regional Environmental Office

On May 5, 2004, in a signing ceremony, the Department of the Army officially transferred more than 5000 acres of land formerly part of Longhorn Army Ammunition Plant (LHAAP) in Harrison County, Texas to the U.S. Fish and Wildlife Service (USFWS). This signing now recognizes the USFWS as the legal guardian for the property. The Army is particularly satisfied that this scenic area, which once proved to be invaluable in wartime, will continue to serve the citizens of the United States.

The transferred acreage will be integrated into the Caddo Lake National Wildlife Refuge system that was established in October 2000 to protect important wildlife habitat found in the surrounding forests and wetlands, to pro-



Hardwood stand near Caddo Lake.

tect migratory bird species, and conduct other fish and wildlife and conservation activities.

In the original cooperative agreement, the Army retained primary jurisdiction, custody, and control of the former LHAAP, and the USFWS agreed to

create a n "overlay" refuge on a portion of the Army lands. The intent was to transfer custody, control and accountability from the Army to the USFWS once certain environmental measures were implemented and deemed success-

Caddo Lake and surrounding

environment straddles the Texas-Louisiana border approximately 15 to 20 miles north of Interstate Highway 20. The lake itself is over 30,000 acres in area and consists of bayous, sloughs and channels that meander through pine and hardwood forest, bald cypress swamp and open water.

The wildlife refuge along Harrison Bayou contains one of the few areas of virgin bottomland hardwood in Texas. These bottomland hardwood forests are considered important habitats for wildlife and are highly valued for the conservation of biological diversity.

The surrounding wetlands are extremely important for biodiversity conservation. These wetlands provide habitat for a great variety of flora and fauna, including more than forty threatened and endangered species, as well as the most diverse native freshwater fish in the state.

A total of 20 animal species of concern are located or potentially located on the former LHAAP and adjacent Caddo Lake. They include seven species of fish, six species of reptiles, six species of birds and four species of mammals. Two species, the Louisiana black bear and bald eagle, are feder-



Caddo Lake cypress and lily pads.

ally listed under the Endangered Species

Caddo Lake and vicinity also has a long history of human habitation beginning with Native Americans called the Caddo for which the lake is named. The Caddos were prosperous farmers, hunters, and gatherers who lived in permanent villages.

The Caddos developed a sophisticated horticultural economy. They farmed communally, digging, planting, and cultivating the land and the crops for and with each other. The Caddos cultivated corn along with many types of beans, squash, pumpkins, and melons. Theses Native Americans also cultivated tobacco, millet, and sunflowers. They were proficient hunters especially for deer, an animal that furnished them with much of their meat and buckskin clothes. The Caddos also developed a trading system that covered distances as far away as New Mexico and the Great Lakes.

It is this rich natural and cultural history that led EPA Administrator for Region 6, Richard E. Greene to say, "Biologically diverse land like this is a priceless asset."

# **Good Land Stewardship Means Safe Training for Soldiers At Fort Riley**

#### By Ms. Sam Robinson

Assistant Media Relations Officer Fort Riley, Kansas

On a dark summer night, Humvees and Bradley Infantry Fighting Vehicles cut across a Fort Riley prairie left soft and sloppy by recent rains.

One driver scans the open field as he approaches a row of vegetation growing taller than the prairie grass in front of him. He sees nothing important about the change in vegetation and steers his Humvee through the growth and nature jolts him and his passengers to new reality as the vehicle's front end drops into a camouflaged gully.

The vehicle and the training come to a sudden stop. His vehicle is damaged, but the driver and passengers have escaped injury - this time.

"We have gullies on the range that start as foxholes, tank tracks or tracks from mine plows," said Monte Cales, Fort Riley's land rehabilitation and maintenance coordinator. "With rain and time, small soil displacements can turn into trenches 3 or 4 feet deep."

A Humvee going 20 mph can turn over if it hits a trench that deep. The cost in equipment damage, lost training time and Soldier injury can add up quickly.

lost training time and Soldier injury can according checked, and up quickly.

Erosion gully forming at vehicular traffic area. *Photo courtesy of Fort Riley*.

Cales and other Integrated Training Area Management (ITAM) staff strive to identify range areas where gullies and trenches may form because of soil displacement and erosion. Soil erosion increases when surface vegetation is damaged or removed by training activities. Erosion removes productive topsoil and that further decreases the soil's ability to sustain

vegetation that helps control erosion.

Soil must remain stable in order to



ITAM personnel examine ditch damaged by maneuver traffic and water drainage. *Photo courtesy of Fort Riley*.

sustain military training on Fort Riley, according to ITAM's staff. Left unchecked, erosion can create gullies

that obstruct training and present a safety hazard. The eroded soil may be deposited in streams and water courses, causing off-site pollution problems.

ITAM's primary goal is to provide Fort Riley Soldiers with the safest, most realistic training "classroom" possible, said Phil Woodford, Fort Riley's ITAM coordinator.



Row of sunflowers, a possible indicator of a gully. *Photo courtesy of Fort Riley*.

Range management and sustainability plans look five, 10 and even 50 years

ahead.

"Training on the range is one of the most important tools we can give our Soldiers," said Garrison Commander COL John Simpson. "It is the closest thing to a real combat situation we can offer. We must keep the range in good shape for successful training maneuvers."

Troubled areas of the range are identified in several ways, Cales said. Soldiers who train can give locations of trenches and gullies by noting map coordinates or using a Global Positioning System device

to locate sites via satellite photos. Cales monitors high-traffic training

areas and areas that are prone to recurring problems.

Cales prioritizes areas identified for improvement. Correcting the problem could be as simple as lightly grading an area, seeding new grass or applying mulch; but, in some cases, the process is often much more complicated and involves a cooperative effort between several offices.

"Fort Riley is ahead of other posts when it comes to sustaining the range," said Woodford. "We are creating a database that will help us identify and examine areas with recurring issues."

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Matters of Interest to All DoD Components

### **Legally Brief**

### Presidential Executive Orders and the Environment

By Stanley Rasmussen
CREO Regional Counsel

On August 26, 2004 President Bush issued an Executive Order titled Facilitation of Cooperative Conservation. In his order, the President directed the Secretaries of Defense, Interior, Agriculture and Commerce, and the Administrator of the Environmental Protection Agency to carry out their programs in a manner that facilitates cooperative conservation. Specifically, these Departments, when implementing laws relating to the environment and natural resources, are to do so in a manner that places emphasis on appropriate inclusion and collaboration of Federal, State, local and tribal governments, private for-profit and nonprofit institutions, and other nongovernmental entities and individuals.

This Executive Order is just one of many Executive Orders issued by President Bush since he took office in 2001, but what is an Executive Order? Executive orders are legally binding orders or regulations issued by the President under his authority as the Chief Executive of the United States. Although there is no specific authority in the Constitution for the president to issue Executive Orders, it is generally accepted that such power is inherent in Article II, Section 1 of the Constitution, which vests the executive power in the President. Accordingly, Executive Orders are most often used to direct federal agencies and officials in how they should carry out their responsibility of enforcing federal laws. Executive Orders are also used to direct national security and defense, or to serve as symbolic or ceremonial proclamations such as National Take Your Child to Work Day.

Although Executive Orders have the



Interagency panel members at a recent Southwest Strategy/Border Task Force meeting. From left to right: Susan K. Kozacek, US Forest Service, Joseph R. Dixon, US Army Corps of Engineers, Carol Heathington, Luke Air Force Base, Ernesto Ortega, National Park Service, and Wesley Ward, U. S. Geological Survey. *Photo courtesy of Southwest Strategy* 

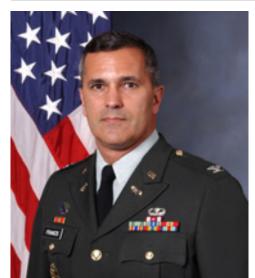
same force and effect of laws passed by Congress, they do not need Congressional Approval. Despite their legal standing, Executive Orders are somewhat tenuous in that they can be revoked by a President as guickly as they are issued. For example, on January 15, 1981, in the final days of his administration, President Carter signed an executive order sharply limiting the export of hazardous substances that are banned or restricted from use in the United States. On February 17, 1981, as one of his first acts in office, President Reagan revoked Carter's 34-day-old executive order. Thus Executive Orders are legally enforceable until they expire per a specified termination date or until they are revoked, changed or otherwise modified by a President.

Executive Orders have been used by

every President since George Washington. Until the state Department began numbering them in the early 1900s, most Executive Orders were unpublished and seen only by the agencies to which they were directed. In fact, Executive Orders were retroactively numbered going back to 1862 when President Lincoln issued the Emancipation Proclamation. Today, all Executive Orders are numbered and are published in the Federal Register to make them official. There are currently more than 13,000 Executive Orders, and as of August 27, 2004, President Bush had issued 155 Executive Orders. In a recent law review article, which looked at the use of Executive Orders to address environmental issues, it was reported that over twenty percent of all Executive Orders

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## Welcome, New AEC Commander and CREO Staff!



Colonel Tony Francis, incoming Commanding Officer, Army Environmental Center. Photo courtesy of the Army Environmental Center.

In July of 2004, Colonel Tony Francis assumed command of the U.S. Army Environmental Center. Colonel Francis's prior assignments include serving as the Chemical Corps Branch Chief at the Army's Human Resources Command in Alexandria, Virginia; Battalion and Brigade Chemical Officer in the 8th Infantry Division in Baumholder, Germany; Chief of the Munitions and Smoke Branch, Directorate of Combat Developments, U.S. Army Chemical School; Company Commander, 82nd Chemical Battalion, Fort McClellan, Alabama; Board Recorder at the U.S. Army Personnel Command in Alexandria, Virginia; XVIII Airborne Corps Artillery Chemical Officer; and Operations Officer for the 83rd Chemical Battalion at Fort Bragg, North Carolina; Staff Officer in the Nuclear, Biological and Chemical Defense Division, Office of the Deputy Chief of Staff for Operations and Plans, Headquarters, Department of the Army; Commander of Anniston Chemical Activity in Anniston, Alabama.; and Staff Officer in the Office of the Deputy Chief of Staff for Logistics, Headquarters, Department of the Army.

Colonel Francis is a graduate of the University of Maryland with a Bachelor of Science Degree in Biology. He was commissioned a second lieutenant in the Chemical Corps from the ROTC program at Johns Hopkins University, Baltimore, Maryland. He received a Masters degree in Business Administration from Central Michigan University in 1995 and Masters in National Security Strategy from National Defense University in 2002.

Colonel Francis's military education includes the Chemical Officer Basic and Advanced Courses, Combined Armed Services Staff School, Command and Gen-

eral Staff College and the National War College. His awards and decorations include the Meritorious Service Medal, the Army Commendation Medal, the Army Achievement Medal, and the Parachutist Badge. 🔊



Mark Salley, Region 7 Army Regional Environmental Coordinator.

Mark Salley has joined the staff at the Central Regional Environmental Office (CREO) as Department of the Army Regional Environmental Coordinator for Region 7. Prior to joining CREO, Mark served as Environmental Specialist in the Environmental Division, Fort Leonard Wood, Missouri for more than 5 years. Mark developed and established the installation environmental inspection program for auditing compliance of multiple types of industrial activities and military combat training and weapons systems operations. He also served as the team leader audit inspections for compliance with RCRA, CAA, CWA, and Pollution Prevention programs.

At Schofield Barracks, Hawaii, Mark served as the natural resources manager for 165,000 acres of military training lands situated in or near rare biological and natural resources. He supervised the development of natural resources management, integrated training area management, endangered species management and historic and cultural resources protection policies, plans, surveys, and procedures.

Ms. Lesley Moore has assumed the duties of Administrative Assistant for CREO. In this capacity, Lesley will provide office automation, logistical and clerical support. Before moving to Kansas City in mid August, Lesley served as the 2004 Executive Vice-President, Chicago Junior Chamber of Commerce (Jaycees) and she is also a member of Junior Chamber International (JCI). Lesley used his opportunity to gain knowledge and become proficient with leadership development and strategic planning in conjunction with developing surrounding communities.

Lesley has held a number of administrative positions before joining the CREO team. For the American Medical Association (AMA), Lesley was a Librarian-Office Assistant, Administrative Assistant to the Director of Integrated Communications Services, and Administrative Secretary to the Department of Operations and Data Analysis at the Accreditation Council of Graduate Medical Education (ACGME).



**Lesley N. Moore,** Administrative Assistant



# Restoring Native Prairie at Whiteman Air Force Base



**By Neil Bass** 

Natural Resources Manager Whiteman Air Force Base

Whiteman Air Force Base, about 55 miles east of Kansas City, Missouri, is located in the Osage Plains ecoregion of Missouri. This ecoregion is part of the larger Osage Plains/Flint Hills tallgrass prairie ecoregion that extends into Kansas and northeastern Oklahoma and was once part of a luxuriant, vast grassland estimated to be over 160 million acres. Tallgrass prairie, the only kind found in Missouri, once stretched from the Canadian border to Texas and east to Indiana in the form of a triangle. Today in the state of Missouri, less than 1% of the original 15 million acres of tallgrass prairie remains.

It is not possible to reconstruct a natural prairie in the historic context, nonetheless, Air Force personnel, natural resources professionals, and others are heavily involved in encouraging native prairie plant growth at Whiteman. Staff from Knob Noster State Park, 509<sup>th</sup> Civil Engineer Squadron; Environmental Flight and the 509<sup>th</sup> Services Squadron, and the Royal Oaks Golf Course, all cooperated to preserve a piece of Missouri's natural heritage.

Currently, there is a 38-acre tallgrass prairie remnant located within the perimeter of Whiteman as well as another 12-acre remnant prairie at the Royal Oaks Golf Course that is managed by Whiteman. This gives Whiteman Air Force Base the distinction of owning the second largest remnant tract of prairie and the largest total prairie acreage in Johnson County, Mis-Additionally, these souri. tracts are the only publicly owned prairies in the county.

Natural resource efforts have focused on improving the condition of the remnant areas and restoring adjacent areas that have been over run by invasive species. The largest prairie tract has been invaded by eastern red cedars, autumn olive, serecia lespedeza (Chinese bush clover), fescue, and multi-flora rose. On the Golf Course, the remnant areas have been invaded by fescue and serecia lespedeza.

The cedars and other woody vegetation that have encroached on the largest remnant prairie are being cut and sprouting species are receiving herbicide stump treatments. Other invasive

species are being managed with a series of mechanical and chemical treatments.

At the golf course, the 12 acres of prairie remnant under management are located in an "out of bounds" area that separates fairways. two Management of this remnant area began in



Catclaw sensitive briar, a vine-like plant common to tall grass prairie. *Photo courtesy of Whiteman Air Force Base*.

2001. The sericea was mowed to prevent it from going to seed. In the following year, the sericea was sprayed with the herbicide. With the support of golf staff.

The efforts at the Royal Oaks Golf Course are of particular interest as a model of cooperation between different agencies and units. The approximately 300 acres that make up the golf course are leased from the Missouri Department of Natural Resources State Parks Division and are administered by the 509th Services Squadron. The 509th Civil Engineer Squadron is managing the prairie remnants.

Through prairie restoration work, Whiteman AFB personnel are helping to preserve one of the most endangered ecosystems in the world and the plant diversity being conserved greatly enhances the biodiversity of the base. This area also serves as an outdoor classroom for an environmental education program through the Youth Center, a study site for the Knob Noster High School biology class, and as training land for Whiteman Security Forces. This is truly a win-win situation where the military is conserving rare natural resources, educating the public, and enhancing mission related training activities. 🔊



Prescribed burning of herbicide treated and untreated vegetation to stimulate the growth of fescue and native grasses. *Photos courtesy of Whiteman Air Force Base.* 

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"This entire process is a great example of inter-agency cooperation," Woodford said. "We have ITAM, NRCS, Public Works, Kansas State University, the Corps of Engineers and many other groups working together on a daily bases."

In certain circumstances, an area will often need to be completely reshaped by flattening the slope of the gully walls. This practice stabilizes the channel, removes the safety hazard and prepares the site for seeding.

Stone riprap walls are used to shape channels if storm water cannot be safely diverted or if vegetation cannot be established because of heavy training loads.

Some gullies and trenches are so deep it is not cost effective to reshape them. If possible, diversions, such as dead trees and limbs, are used to fill the area and keep Soldiers and equipment out.

In addition to trenches and gullies that can swallow Humvees and Bradleys, deep holes in the range result from foxholes that have washed out. Sometimes these holes, which appear to be simple mud puddles, can be 3 or more feet

Land rehabilitation and maintenance coordinator showing the depth of a potential water hazard. *Photo courtesy of Fort Riley.* 

deep.

"If a Soldier was to walk off into a hole like that, there would be an injury," Cales said. "Who hasn't stepped into a puddle? The person next to you could walk right through, in just inches of water. That's the danger."

"Safety of the Soldier is our top concern," COL Simpson said. "Training accidents can and

accidents can and unfortunately do happen. It is our job to do whatever we can to identify problems and take care of it before the Soldier is out there training."

COL Simpson and the ITAM staff agreed that the key to successfully improving the areas of the range that have been damaged is using materials that are available and natural to Fort Riley for repairs without inhibiting the training of Soldiers.

In the past, "We were having problems with the ditches getting tore up and creating a lot of run-off," Cales said. "We tried to plow the ditches so Soldiers would stay out of them. We tried to put in barricades to keep vehicles out. No matter what we did the ditches were getting used because they provide good cover during maneuvers. "Now, instead of trying to alter the behavior or tactics during training, we are going with it. We rock the ditches to prevent the run-off and allow the vehicles to safely travel that way."

The land rehabilitation and maintenance program has been successful. In 2003, six hardened low-water stream crossings were completed and 32,448 linear feet of gully stabilization was installed. Also, the post built seven hardened approaches, repaired 38,700 linear feet of erosion, completed 12,760 linear feet of graded diversions, replanted 65 acres of land and repaired maneuver damage on 4.2 acres of the training area, including 25



Another potentially dangerous gully that could overturn a vehicle and injure Soldiers during training maneuvers. *Photo courtesy of Fort Riley*.

abandoned defilades.

In addition to the soil damage, the ITAM staff monitors soil displacement. Maintaining the appropriate levels of soil and sediment entering the water supply is an important part of every maintenance plan.

Planning and placing waterway crossings is as imperative to training successfully as is gully repair. Without the proper crossing, vehicles can easily get stuck and create new trenches. ITAM also is establishing an extensive test plot for native Kansas grasses. The plot will be used to determine which grasses help best to prevent run-off and resist damage.

"Sometimes it seems like a neverending process. Well, it is a neverending process," Cales said. "But it is worth keeping after, for sure. The work that I am doing can prevent a Soldier from being injured, and that's what it is all about."



# **Army Announces Comprehensive Strategy for the Environment**

The Army has announced a comprehensive strategy to enable the Army to meet its mission now and into the future. The strategy, titled "The Army Strategy for the Environment: Sustain the Mission, Secure the Future," transitions the Army's compliance-based environmental program to a mission-oriented approach based on the principles of sustainability.

The six-point strategy will replace the Army's current "Environmental Strategy into the 21st Century" published in November 1992. The new Strategy builds on the lessons learned from sustainability pilot programs conducted at Army installations, such as Fort Bragg, North Carolina; Fort Lewis, Washington; Fort Hood, Texas; and Fort Carson, Colorado, and institutionalizes those efforts. As a result, this Strategy will build stronger relationships with local communities in order to find common solutions to environmental issues, while protecting training lands for Soldiers.

The Army began drafting its environmental strategy in November 2003, pulling together personnel across all function areas for input and assistance. The Army Strategy for the Environment: Sustain the Mission, Secure the Future outlines the Army's long-term vision and sustainability goals. The goals are as follows:

- Foster a Sustainability Ethic: Foster an ethic within the Army that goes beyond environmental compliance to embrace sustainability.
- Strengthen Army Operations: Strengthen Army operational capability by reducing it's environmental footprint through more sustainable practices.
- Meet Test, Training, and Mission Requirements: Meet current and future training and testing and other mission requirements by sustaining land, air, and water resources.
- Minimize Impacts and Total Ownership Costs: Minimize impacts and total ownership costs of Army systems, materiel, facilities, and operations by integrating the principles and practices of sustainability.

- Enhance Well-Being: Enhance the well-being of Soldiers, civilians, families, neighbors, and communities through leadership in sustainability.
- Drive Innovation: Use innovative technology and the principles of sustainability to meet user needs and anticipate future Army challenges.

From this Strategy document, the Army will develop a strategic plan that will contain more specific objectives and initiatives to meet its goals. As it develops its strategic plan, the Army will collaborate with a wide variety of internal and external experts and stakeholders.

To view the text of the "The Army Strategy for the Environment: Sustain the Mission, Secure the Future" in its entirety, please go to https://www.asaie.army.mil/Public/ESOH/1ESOH\_default.html.

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cluding painting rocks and making dreamcatchers, as well as answering questions about the artifacts on display and program activities. Lisa Laffey brought her talented history club members from Union Grove Middle School to teach kids about paleontology and fossils. The new Fort Hood Archaeology T-shirt was an even bigger hit with the kids this year as they carefully prepared their maps to earn one. A number of the parents were soldiers and teachers in the community and were just as excited to learn about Fort Hood's Cultural Resource Program and its role on the installation.

The end of October may mean the completion of Texas Archaeology Month around the state, but at Fort Hood's Cultural Resources archaeology is important year-round! Team members can usually find time to conduct training or educational presentations for almost any type of group, whether it is a soldier unit, school children, or a local civic group like Rotary Club. In fact, team members are so dedi-



Parents and kids get into digging at the Fort Hood Archaeology Fair! *Photo courtesy of Fort Hood.* 

cated to increasing awareness of the long history of the Fort Hood area that they are often volunteer for these types of events during off-duty hours on evenings or weekends. Outreach is an important component of any Cultural Resource Program as it contributes to raising awareness about site vandalism and looting, federal land regulations regarding archaeological resources and how the Army works to protect the Nation's heritage.

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address environmental issues. On the Defense Environmental Network and Information eXchange (DENIX) website, 80 Environmental Safety and Occupational Health Executive Orders are posted for use and reference.

These Executive Orders dating from 1966 address a wide variety of environmental topics potentially affecting the military ranging from floodplain management, Superfund implementation and greening of the government to coral reef protection. In addition, in the EPA's 1999 document titled *The Yellow Book: Guide to Environmental Enforcement and Compliance at Federal Facilities*, 20 Executive Orders are specifically identified as containing important directives concerning environmental requirements applicable to federal facilities.

As for the Cooperative Conservation Executive Order referenced above, the CREO is pleased to report that the Department of Defense has been and continues to be actively cooperating with state and local governments and other nongovernmental entities to work on many environmental issues For example, DoD is actively participating in the Southwest Strategy (SWS)/Border Task Team to address environmental impacts associated with border security. The team members include the DoD, the US Department of Agriculture, Department of Interior, US Environmental Protection Agency, and other interested parties.

DoD has formed a work group with the Environmental Council of States to address installation sustainability, and the CREO is an active participant in this work group. During the past year, CREO has worked with the Council of State Governments with regard to encroachment upon military installations. In addition, DoD has supported, through SWS, a training session involving over 100 representatives of the DoD and over 35 state, local and tribal entities including the Navajo Nation, Hopi Tribe and others to discuss how effective communication can be a key to natural and cultural resource management.

During the coming months, it is likely that you will see the DoD and its Regional Environmental Offices coordinating more and more with state and local governments as well as various nongovernmental entities. And it is anticipated that the Executive Order for Cooperative Conservation will only increase this level of coordination and cooperation.

#### **References:**

- 1. Executive Orders and Presidential Commands: Presidents Riding to the Rescue of the Environment, William H. Rodgers, Jr., 21 J. land resources & Envtl. L. 13 (2001).
- 2. Executive Orders, "the Very Definition of Tyranny," and the Congressional Solution, the Separation of Powers and Restoration Act., Leanna M. Anderson, 29 Hastings Const. L. Q. 589 (2002).
- 3. What is an Executive Order? Questions & Answers Archive on This Nation website, http://www.thisnation.com/question/040.html.
- 4. Defense Environmental Network and Information eXchange, https://www.denix.osd.mil/denix/Public/Legislation/EO/toc.html.

# Robert Gill, Incoming Director of the Air Force Center For Environmental Excellence Central Regional Office in Dallas, Texas.



Mr. Robert Gill is the new Director of the Air Force Central Regional Office in Dallas and the DoD Regional Environmental Coordinator for Region 6. Mr. Gill earned his Bachelor of Science degree in Civil Engineering from Colorado State University. He subsequently worked several years for private consulting and engineering firms in Colorado and Arizona. Mr. Gill began work for the U.S. Air Force at F. E. Warren Air Force Base in Wyoming. Through his work there and at several other Air Force installations, Mr. Gill gained experience in the permitting and operation of landfills, construction and operation of wastewater treatment facilities, clean up of underground storage tank locations, and monitoring and disposal of hazardous materials. He also completed his Master's degree in Engineering Management, focusing on participative techniques in engineering organizations.

Mr. Gill served as an engineer and the Remediation Program Manager for the Air Force Center for Environmental Excellence (AFCEE), at the Massachusetts Military Reservation (MMR). Prior to that, he was assigned to Brooks Air Force Base in Texas, as the Base Civil

Engineer, where he led an organization of 130 personnel responsible for the full spectrum of base property management, including - fire protection, housing, facility maintenance, and construction. In addition, he spearheaded the Brooks City-Base Project, a partnership between the Air Force and the City of San Antonio. His close work with community leaders helped advance the project's goals of improving Air Force mission effectiveness and stimulating the City's economic development, while sharing the cost of quality installation support.

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Commander, USAEC **Chief, Public Affairs** Chief, CREO

**COL Tony R. Francis Robert DiMichele Bart Ives** 

Mission: The CREO supports the Army and DoD mission through coordination, communication and facilitation of regional environmental activities. The Army REOs are part of a DoD network in which the Army, Air Force and Navy each has lead responsibility for mission implementation in the 10 Standard Federal regions. The CREO has DoD lead responsibility for Region 7 and Army lead responsibility for Regions 6 & 7.

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